

# La Valute Formation

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Österreichische Karte 1:50.000

Blatt BMN 197 Kötschach

Blatt BMN 198 Weißbriach

Blatt BMN 199 Hermagor

Blatt UTM 3109 Oberdrauburg

Blatt UTM 3110 Kötschach-Mauthen

Blatt UTM 3116 Sonnenalpe Naßfeld

Blatt UTM 3117 Nötsch im Gailtal

Carta Topografica d'Italia 1:50.000

Foglio 018 Passo di Monte Croce Carnico

Foglio 032 Tolmezzo

Foglio 033 Tarvisio

## Definition

Well-bedded (5-20 cm in thickness) light gray/ochreous cephalopod bearing limestone (mudstone to wackestone), slightly nodular at places (mainly in the upper part of the unit).

## Description

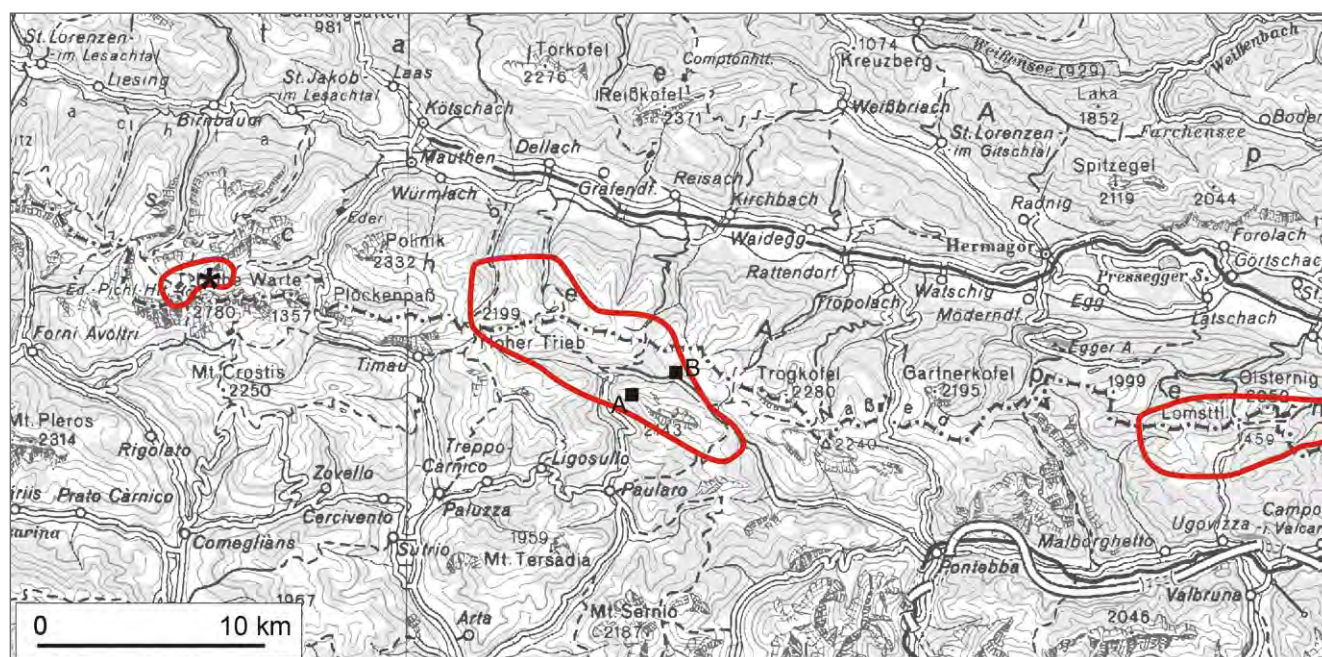
The La Valute Formation consists of thin-bedded light gray and brownish gray nodular mudstone to wackestone. At places it can be more coarse and compact. The thickness of beds is in general 10-15 cm, even if thinner or thicker beds may occur at places. In the uppermost couple of meters of the unit, beds become very thin to thin with silty and marly intercalations, then gradually pass into the Findenig Formation. Orthoceratid nautiloids, even if not very abundant, are the only fossils clearly visible in the field.

## Fossil content

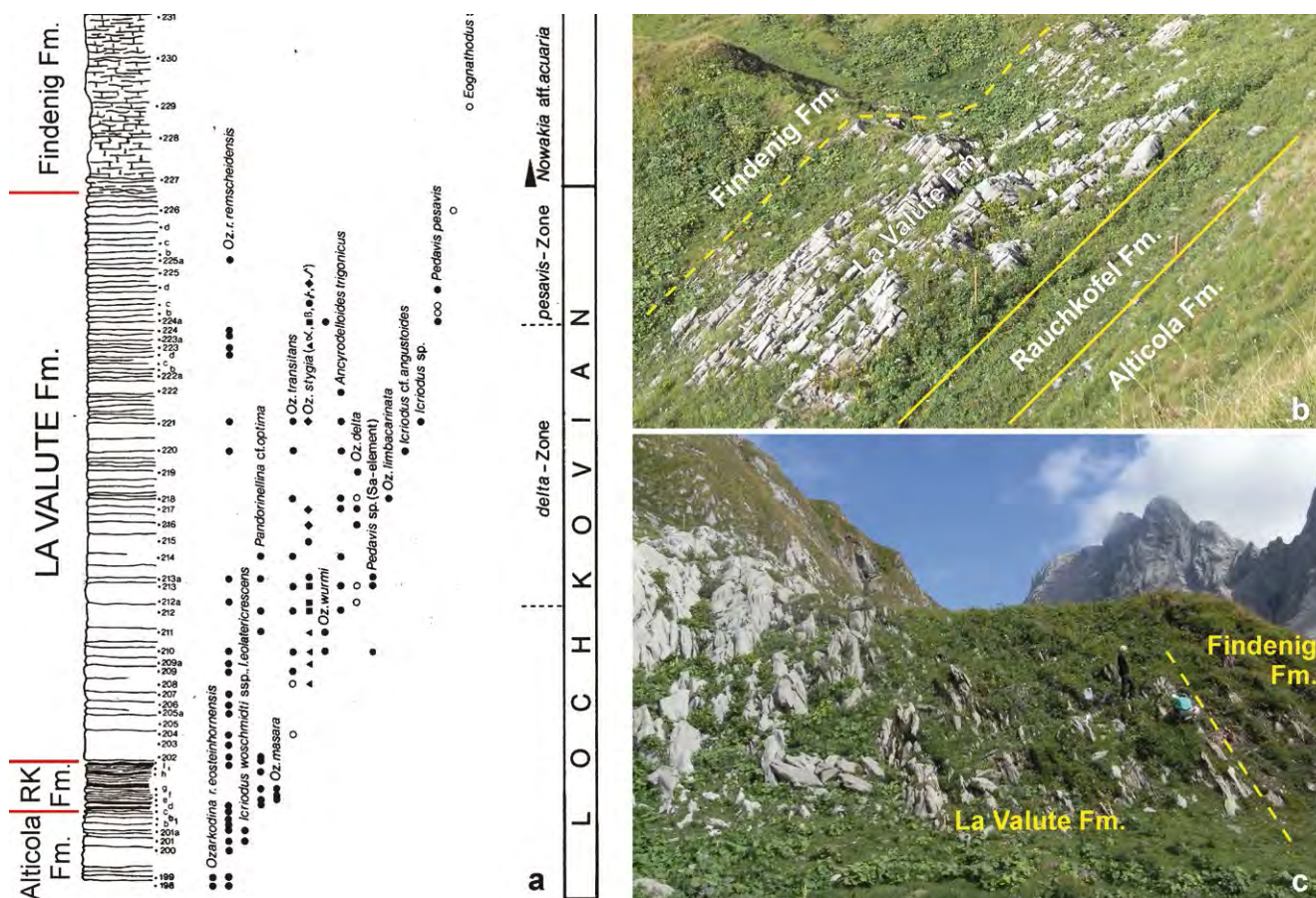
Conodonts, cephalopods (nautiloids), dactyloconarids, sponge spicules, trilobites, ostracods, crinoids, brachiopods.

## Depositional environment

Pelagic environment.



Areas of outcrop of the La Valute Formation with indication of the stratotype (asterisk) and reference sections (squares). A: La Valute Cave Section; B: Rio Malinfier West Section.



The Rauchkofel Boden Section. a) log of the Devonian part of the section (modified after SCHÖNLAUB, 1980); b-c) views of the section (photo C. CORRADINI).

## Stratotype

Rauchkofel Boden Section, located on the southern slope of Mt. Rauchkofel (SCHÖNLAUB, 1970, 1980; SCHÖNLAUB et al., 1997), at coordinates N 46°36'53.5", E 12°52'33.0".

## Reference sections

La Valute Cave Section (coordinates N 46°34'18", E 13°07'19.1"), where the upper boundary of the unit is well exposed and the name La Valute limestone has been used for the first time (CORRIGA et al., 2011).

Rio Malinfier West Section (coordinates N 46°34'50", E 13°07'151.6"), where the boundaries with the Rauchkofel Formation, the Nölbling Formation and the Findenig Formation are exposed and the facies is deeper than the stratotype (CORRIGA, 2011; CORRADINI et al., 2012).

## Type area

Carnic Alps.

## Main outcrop areas

The La Valute Formation crops out along the whole Carnic Alps, mainly in Lake Wolayer-Rauchkofel, Cuestalta/Hoher Trieb to Mt. Pizzul and Monte Cocco sectors.

## Thickness

About 18 m.

## Boundaries

*Underlying unit* – Rauchkofel Formation (conformable sharp), Nölbling Formation (conformable sharp).





Views of the La Valute Formation in the field, Rio Malinfier West Section (a: photo L. SIMONETTO; b: photo C. CORRADINI).

*Overlying unit* – Findenig Formation (conformable gradual).

*Lateral unit* – Rauchkofel Formation, Nölbling Formation.

### Derivation of name

After La Valute, the westernmost top of Mt. Zermula massif.

### Synonymy

Grauer und rother Kramenzelkalk [partim]: FRECH (1894).  
 Calcari stratificati con calcescisti: TARAMELLI (1895).  
 Calcari a tentaculiti [partim]: VAI (1963); VENTURINI (2006).  
 Calcari nerastri a Brachiopodi e Crinoidi, calcari nodulari: ASSERETO et al. (1968).  
 Findenig-Kalk [partim]: PÖLSLER (1969).  
 Grey Flaser-limestone: SCHÖNLAUB (1980).  
 Nodular grey limestone: SCHÖNLAUB (1980).  
*Orthoceras* limestone [partim]: SCHÖNLAUB (1980).  
 Pelagic tentaculitid limestone [partim]: SPALLETTA & VENTURINI (1990); VAI (1998).  
 Boden-Kalk: SCHÖNLAUB (1985).  
 Boden Limestone: KREUTZER (1992); FERRETTI et al. (1999); CORRIGA & CORRADINI (2009).  
 Calcari di Cuestalta [partim]: SPALLETTA & PONDRELLI (2009).  
 La Valute Limestone: CORRIGA et al. (2011, 2012); CORRADINI et al. (2012).  
 La Valute Formation: CORRIGA et al. (2012).  
 Bodenkalk/Boden Limestone: SUTTNER & KIDO (2014).

### Chronostratigraphic age

Devonian: Upper part of lower Lochkovian to upper Lochkovian.

### Biostratigraphy

*Conodonts*. – From the uppermost part of *Icr. postwoschmidt*i Zone to within the *M. pandora*  $\beta$  Zone.

Different ages have been documented for the base of the unit in various parts of the Carnic Alps: in the central sector the base of the unit is in the lower part of the *A. carlsi* Zone (CORRIGA, 2011; CORRADINI et al., 2012), whereas in the eastern part (Monte Cocco area) lies in the uppermost part of the *Icr. postwoschmidt*i Zone (CORRIGA & CORRADINI, 2009). The upper boundary can be always traced within the *M. pandora*  $\beta$  Zone (i.e. SCHÖNLAUB, 1980; CORRIGA et al., 2011).

*Dacryoconarids*. – *Homoctenowakia bohémica* to *Paranowakia intermedia* zones (ALBERTI, 1985).

### Complementary references -

### Remarks -

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